7/10/2025   DATE
☑ REQUIRED COURSE
☑ ELECTIVE COURSE

TEC   DIVISION
☑ NEW COURSE
☐ REVISION

Lake Land College
Course Information Form

COURSE NUMBER:	BCT-057	TITLE: *(30 Characters Max)*		Framework: Walls to Rafters				

SEM CR HRS:	2.0	Lecture:	1.0		Lab:	2.0	ICCB Lab:	2.0	ECH:	3.0

Course Level:	☐ Gen Ed/IAI ☐ Baccalaureate/Non-IAI	☑ Career/Technical ☐ Dev Ed/Not in Degree Audit	Clinical Practicum:	0.0	Work-based Learning:	0.0	WBL ECH:	0.0

Course PCS & CIP:	12 - 46.0201	IAI Code:	N/A	Contact Hours (Minutes/Week)

Repeatable (Y/N):	N	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:		Max:		16 Wks	150	8 Wks	300

Prerequisites:	BCT - 047
Corequisites:	None
Catalog Description: (40 Word Limit)	Explore floor systems, wall framing techniques, roof rafters, trusses and exterior sheathing. Students build structural components through lab-based projects that emphasize accurate layout, assembly and safe use of framing tools and materials.

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work-based Learning
Floor systems	3	6		
Stair stringers and assemblies	2	4		
Stair stringers and assemblies	2	4		
Wall assembly and layout	2	4		
Roof design: rafters and trusses	2	4		
Rafter and truss installation	3	6		
Exterior wall sheathing	1	2		
TOTAL	15	30	0	0

EVALUATION

QUIZZES ☑	EXAMS ☑	ORAL PRES ☐	PAPERS ☐
LAB WORK ☑	PROJECTS ☑	COMP FINAL ☑	OTHER ☐

COURSE MATERIALS

TITLE:	Instructor Resources
AUTHOR:	
PUBLISHER:	
VOLUME/EDITION/URL:	
COPYRIGHT DATE:	

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		The student will be able to:
Floor systems	9	1. Construct and identify various floor system components according to industry standards. 2. Explain the structural principles and safety considerations involved in floor system installation.
Stair stringers and assemblies	6	1. Accurately measure and cut stair stringers and other assembly components. 2. Assemble functional stair systems adhering to industry standards and building codes.
Wall framing	6	1. Identify and select appropriate lumber and materials for wall framing. 2. Demonstrate proper techniques for laying out and cutting wall studs, plates and headers.

Wall assembly and layout	6	1. Apply knowledge of framing techniques to assemble wall sections with precision. 2. Interpret blueprints and accurately lay out wall placements on a subfloor.
Roof design: rafters and trusses	6	1. Differentiate between various roof designs, including rafter and truss systems. 2. Calculate basic measurements for common rafter and truss components.
Rafter and truss installation	9	1. Safely install rafters and trusses, ensuring proper alignment and secure fastening. 2. Implement fall protection measures and other safety protocols during roof framing.
Exterior wall sheathing	3	1. Apply exterior wall sheathing according to manufacturer's specifications and building codes. 2. Utilize appropriate tools and techniques for efficient and secure sheathing installation.
	45	

Outcomes*	Outcome Title	At the successful completion of this course, students will be able to:
Course Outcome 1	Construct Foundation	Construct foundational structural components for residential buildings, including floor systems, wall framing and roof structures.
Course Outcome 2	Safe Pract Tool Usg	Apply safe practices and proper tool usage throughout all phases of rough carpentry, promoting a safe and secure work environment.
Course Outcome 3	Specs Frame Accurate	Interpret basic blueprints and specs to plan and execute framing projects accurately, ensuring structural integrity and alignment with area building codes
Primary Laker Learning Competency	Critical Thinking: Students connect knowledge from various disciplines to formulate logical conclusions.	
Secondary Laker Learning Competency	Information & Technology Literacy: Students evaluate information effectively using the appropriate technological tools.	

*Course and program outcomes will be used in the software for outcomes assessment and should include at least 1 primary and 1 secondary Laker Learning Competency. Limit to 3-5.